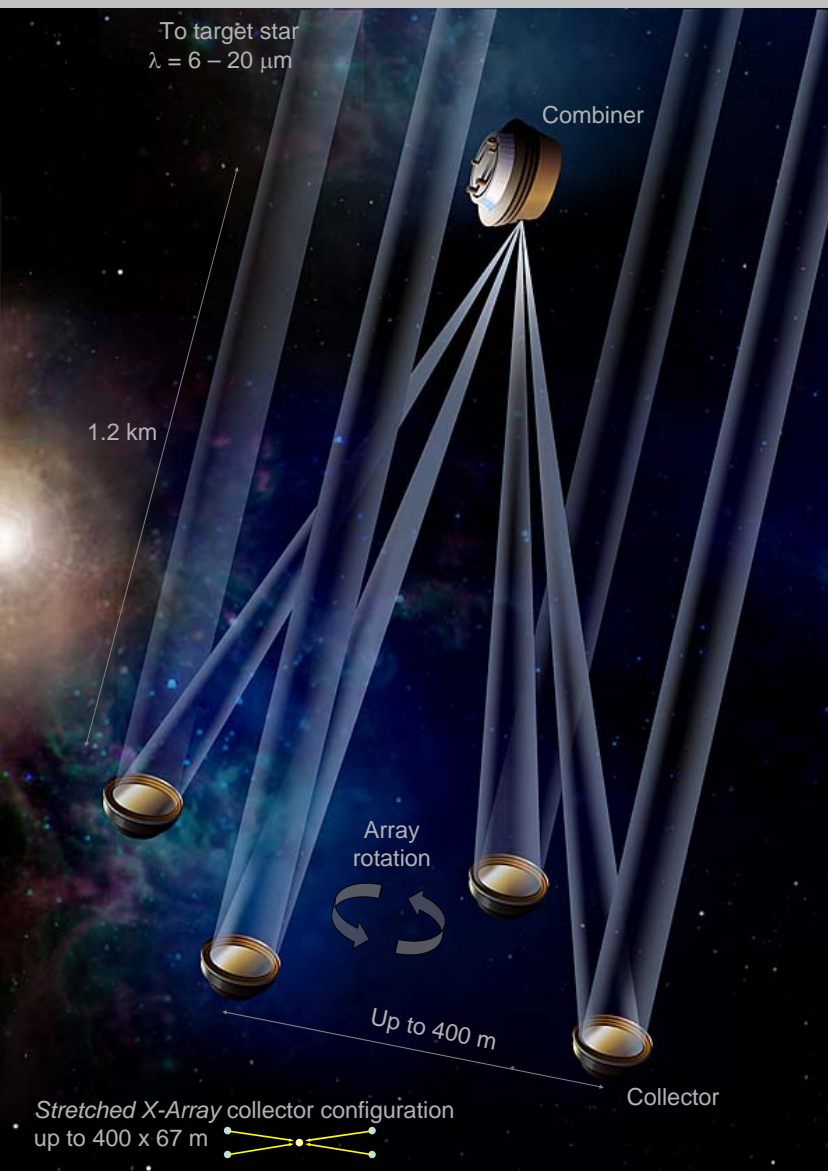
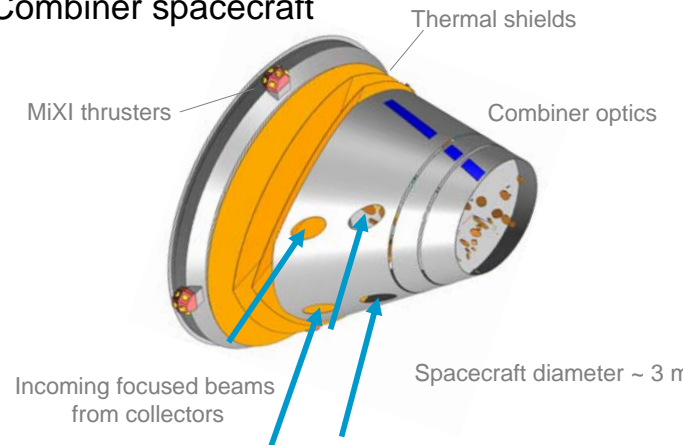


Oliver Lay (335), Stefan Martin (383), Peter Lawson (383), Sarah Hunyadi (383)

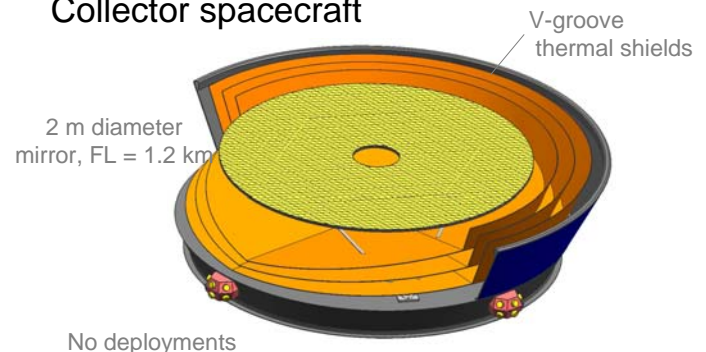


The Emma X-Array combines the JPL X-Array configuration with the ESA out-of-plane 'Emma' geometry, resulting in a large reduction in mass and complexity over previous designs, while retaining the powerful planet-finding and characterization performance of mid-infrared nulling interferometry. This architecture was the basis for the proposed joint TPF-I/Darwin mission.

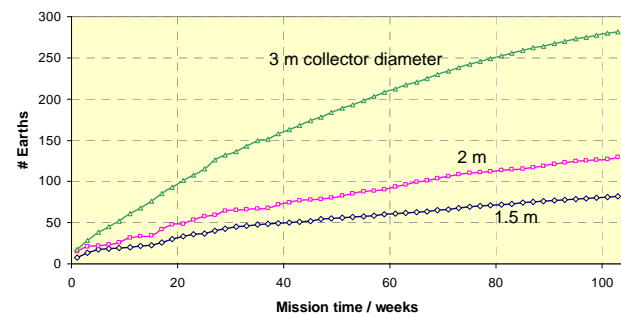
Combiner spacecraft



Collector spacecraft



Performance: planets found

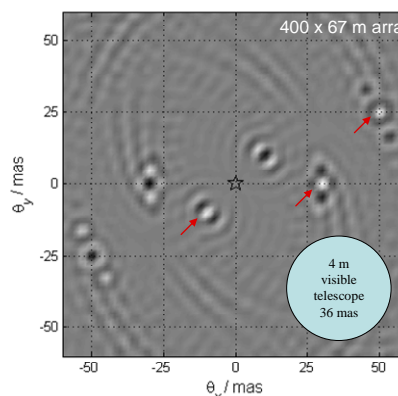


130 Earths in 2 years for 2 m collector diameter
Assuming 1 Earth per star

More information:

<http://planetquest.jpl.nasa.gov/TPF-I/>

Performance: imaging



Dirty map with no deconvolution
Each real planet has negative mirror image
Angular resolution ~ 2.5 milliarcseconds

Performance: working angle

